



# SPECIFICATION FOR APPROVAL

Date : 2022/05/26

<i>Conductive Polymer Aluminum Solid Capacitor</i>		<b>GPT Series</b>									
Capacitance : 1500 $\mu$ F	Tolerance : $\pm 20\%$	Type : Radial									
Voltage : 6.3 V DC	Part No. : GPT-1500M6.3V0812										
Dimension (mm)											
		<table border="1"> <tr> <td><math>\phi</math> D</td> <td><math>8 \pm 0.5</math></td> </tr> <tr> <td>P</td> <td><math>3.5 \pm 0.5</math></td> </tr> <tr> <td>L</td> <td><math>12 \pm 1.5</math></td> </tr> <tr> <td>d</td> <td><math>0.6 \pm 0.1</math></td> </tr> </table>		$\phi$ D	$8 \pm 0.5$	P	$3.5 \pm 0.5$	L	$12 \pm 1.5$	d	$0.6 \pm 0.1$
$\phi$ D	$8 \pm 0.5$										
P	$3.5 \pm 0.5$										
L	$12 \pm 1.5$										
d	$0.6 \pm 0.1$										
<b>Specification :</b>											
1 Operating Temperature Range	: $-55^{\circ}\text{C} \sim +105^{\circ}\text{C}$										
2 Leakage Current ( $\mu$ A)	: $I \leq 1890 \mu\text{A}$ (After 2 minutes application of rated.)										
3 Surge Voltage DC	: Rated voltage x 1.15 V										
4 Dissipation Factor (Tan $\delta$ )	: 0.10 MAX. ( $20^{\circ}\text{C}/120\text{Hz}$ )										
5 Equivalent series resistance(ESR)	: 10 $\text{m}\Omega$ MAX. ( $20^{\circ}\text{C}/100\text{KHz}$ to $300\text{KHz}$ )										
6 Max. Permissible ripple current	: 5560 mA/ $105^{\circ}\text{C}/100\text{KHz}$										
7 Low Temperature Characteristic (Max Impedance Ratio)	<table border="1"> <tr> <td><math>Z(-25^{\circ}\text{C})/Z(+20^{\circ}\text{C})</math></td> <td><math>\leq 1.15</math></td> </tr> <tr> <td><math>Z(+55^{\circ}\text{C})/Z(+20^{\circ}\text{C})</math></td> <td><math>\leq 1.25</math></td> </tr> </table>		$Z(-25^{\circ}\text{C})/Z(+20^{\circ}\text{C})$	$\leq 1.15$	$Z(+55^{\circ}\text{C})/Z(+20^{\circ}\text{C})$	$\leq 1.25$	:				
$Z(-25^{\circ}\text{C})/Z(+20^{\circ}\text{C})$	$\leq 1.15$										
$Z(+55^{\circ}\text{C})/Z(+20^{\circ}\text{C})$	$\leq 1.25$										
8 Load Life Test	: After 5000 hours application of W.V. at $105^{\circ}\text{C}$ and the being stabilized at $20^{\circ}\text{C}$ . The capacitor shall meet with following limits :										
	<table border="1"> <tr> <td>Capacitance Change</td> <td><math>\leq \pm 20\%</math> of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td><math>\leq 150\%</math> of specified value</td> </tr> <tr> <td>ESR</td> <td><math>\leq 150\%</math> of specified value</td> </tr> <tr> <td>Leakage Current</td> <td><math>\leq</math> initial specified value</td> </tr> </table>			Capacitance Change	$\leq \pm 20\%$ of initial value	Dissipation Factor	$\leq 150\%$ of specified value	ESR	$\leq 150\%$ of specified value	Leakage Current	$\leq$ initial specified value
Capacitance Change	$\leq \pm 20\%$ of initial value										
Dissipation Factor	$\leq 150\%$ of specified value										
ESR	$\leq 150\%$ of specified value										
Leakage Current	$\leq$ initial specified value										
9 High temperature & High humidity : (Constant)	After storing for 1000 hours at $60^{\circ}\text{C}$ 、90~95% R.H.										
	<table border="1"> <tr> <td>Capacitance Change</td> <td><math>\leq \pm 20\%</math> of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td><math>\leq 150\%</math> of specified value</td> </tr> <tr> <td>ESR</td> <td><math>\leq 150\%</math> of specified value</td> </tr> <tr> <td>Leakage Current</td> <td><math>\leq</math> initial specified value</td> </tr> </table>			Capacitance Change	$\leq \pm 20\%$ of initial value	Dissipation Factor	$\leq 150\%$ of specified value	ESR	$\leq 150\%$ of specified value	Leakage Current	$\leq$ initial specified value
Capacitance Change	$\leq \pm 20\%$ of initial value										
Dissipation Factor	$\leq 150\%$ of specified value										
ESR	$\leq 150\%$ of specified value										
Leakage Current	$\leq$ initial specified value										